

Why You Shouldn't Touch These Top-Selling Kitty Litters

There are two concerns with today's most popular cat litters, and they're substantial. So significant, in fact, you really shouldn't handle this one type of litter, fresh or used. So should you be concerned about allowing your cat to use them? Yes, indeed. Here's why.

Reviewed by [Dr. Becker](#)

STORY AT-A-GLANCE

- Biobased products are defined as materials, chemicals and energy derived from renewable biological resources
- Jonah Levine's biochar litter was tested against two top-selling litters in the natural category — one corn-based, the other made from walnuts
- The biochar litter significantly outperformed the top-selling litters in both clumping ability and absorbency
- A huge additional benefit of biochar litter is it is entirely nontoxic for cats, and environmentally friendly

Editor's Note: This article is a reprint. It was originally published June 12, 2016.

Biobased products are defined as materials, chemicals and energy derived from renewable biological resources. Jonah Levine has spent a decade working on biobased products, and he's especially passionate about products made with biochar.

Biochar is made from biomass, which is then turned into carbon. It's a natural process that takes atmospheric carbon out of the environment and turns waste material into value-added products and consumer goods. Jonah has created a biochar cat litter we're going to talk about and demonstrate today.

Many Types of Litter on the Market Today Aren't Appealing to Cats

Jonah explains that typically, biochar is put into soil environments.

"Biochar is special," says Jonah, "because it has a huge surface area and is a recalcitrant. That means the charcoal itself holds on to things. It holds on to nutrients. It holds on to water. It holds on to smells.

When we think about our furry family members, we want them to have clean spaces with low odors and natural-based products. That's why biochar fits really nicely into cat litters."

Jonah is definitely on the right track. Studies on the types of litter cats prefer show they are quite particular about particle size. The cat's evolutionary substrate, for potty purposes, is sand. When kitties started living indoors, clay litter came along and most cats were okay with it. But clay has its own issues.

These days, there's a wide selection of organic and natural types of litters on the market, but many of them feature big particle sizes, which don't appeal to most cats. The danger in forcing an objectionable litter on cats is they often develop litterbox aversion, which can lead to other problems (e.g., **eliminating outside the box**).

Kitties also don't like synthetic scents or odor control additives in their litter, and one of the wonderful benefits of Jonah's biochar product is that it's very effective at naturally controlling litterbox odor.

"It has a super-high surface area," explains Jonah. "It controls odors and soaks up liquid. And over time, because it doesn't contain any sugar-based ingredients, it actually controls biological growth as well."

Biochar Kitty Litter Versus Two Top-Selling 'Natural' Litters

The issue with corn-based litters is twofold. Number one, 90% of the corn grown in the U.S. is genetically modified. Secondly, corn crops (and wheat as well) are treated with the herbicide glyphosate.

If a cat ingests a corn- or wheat-based litter, he's ingesting chemical herbicides, starch, and potentially mold, including deadly aflatoxins. Jonah has actually demonstrated both in the lab and in product trials that there can be a profound amount of mold growth in corn-based cat litter.

In fact, any litter containing sugar-based ingredients has a much higher probability of producing mold and other types of potentially toxic growth than litter made from biochar, which contains no starch or sugar.

Jonah has conducted two tests. One test is for clumping, which is a very important feature of cat litter. Clumping extends the life of the litter and provides a healthier environment for cats. We're also going to test the quality of absorption, which is the ability of litter to soak up liquid.

For the clumping test, he adds 5 milliliters (ml) of liquid to each of the three litters to simulate cat urine, and lets it sit for a minute. For the absorption test, he's put equal amounts of each of the three litters in three cups, and added 170 ml of water to each cup.

Biochar Litter Is More Absorbent and Produces Better Clumps

It's obvious looking at the three litters that the biochar litter has achieved total absorption of the 170 ml of water. The other two products are soupy and messy by comparison.

"Just totally solid, maybe a drip, but totally solid-grade absorption," is how Jonah describes the performance of his biochar litter. That means the product in the litterbox will last longer, and there will be less total wetness and mess.

And not only that, but the biochar litter is 100% biodegradable and compostable. And it's entirely fragrance-free, because the carbon helps to lock in odors. The biochar litter passed the absorption test well ahead of the corn and walnut litters, and now we're looking at the clump test results. The biochar litter has formed solid clumps that don't break apart if they're dropped.

Most cats like to keep their pee and poo clumps confined to one area of the litterbox, so the clumping ability of the biochar product is very helpful for keeping the rest of the litter clean. It also makes scooping the box a breeze.

The clumps produced by the other two litters are breaking apart very easily and making a mess. This means the whole box must be changed out frequently because there's really no way to remove all the waste efficiently. Residual urine can be very offensive to sensitive cats and kitties with litterbox aversion.

Definitely one of the highlights of biochar litter was the natural odor control. Even when a cat poops in the box, as soon as she covers it with litter, the smell evaporates.

"The strength of the clump has a lot to do with odor control over time," explains Jonah. "The clump sort of turns the odor solid. When we smell stuff, it's because it's evaporating up into the air. If you have a liquid or a gas, it smells a lot stronger. If it clumps into a solid, the smell really gets knocked down. That's why good clumping performance helps control odors."

The same holds true for the strong ammonia smell produced by cat urine. The biochar product neutralizes it immediately. This is really great if you occasionally skip a day of scooping because your whole house doesn't end up smelling like a litterbox!

Biochar Litter Is Entirely Nontoxic for Cats and Environmentally Friendly

Jonah's product is the first carbon-neutral cat litter. "There's a lot of math about carbon neutrality, carbon negativity, and atmospheric carbon positivity," says Jonah.

"What I like to say about it is we are a carbon-progressive company. We are a wood products company. We make biobased products out of wood products. Those materials come in, off of what's called a stewardship contract. We're very conscientious about how we harvest wood. Then we bring it in to process.

As part of that process, we make our biochar, and the idea is to use the photosynthesis that grew the plant to capture carbon from the atmosphere, then to turn into biochar, and in that process, lock that carbon into a solid form. Science tells us that solid form is not going to biodegrade on us. It's the weight of the carbon, which photosynthesis captures, that we sequester by turning into a solid.

Of course, there's a lot of carbon dynamics in the system. I think the best thing to say is we try as hard as possible to be a carbon-progressive company. Meaning, we're trying to sequester carbon from the atmosphere. It's important that we do a lot of math to make sure that we're always taking strides in that direction."

Jonah's biochar kitty litter is a wonderful product, and in case anyone is wondering why it's such a dark color, that's the carbon in it. Knowing that he is improving the environment with the product makes it that much more attractive. It's a litter that is entirely nontoxic for cats, and simultaneously beneficial for the environment.